

39 plastic frame elements 16 & 18 during the bonding and/or molding process to form an integral frame cover element. This ensures that the two halves of the package can be securely affixed to each other. The covers 12 & 14 being wrapped around the frame elements 16 & 18 also serves to strengthen the package due to the fact that a double layer of metal is formed at the perimeter of the package.

Replace the paragraph at column 4, lines 8-11, with the following new paragraph.

1310 --The energy directors 20 & 22 are then sonic welded to the opposing plastic frame element so that the upper frame element 16 is permanently bonded to the lower frame element 18 as shown by welded seam 23, so that both of [which] the frame elements 16 and 18 encase the PCB 28 and the edges of covers 12 and 14 are held together in contact at junction 30.

REMARKS

Reconsideration of this application is respectfully requested.

A. The Objection to the Specification

The specification was objected to as failing to provide proper antecedent basis for the terms "first package half," "u-shaped edge," and "second package half." Applicants have amended the specification to provide antecedent basis for these terms.

B. The Drawings

The drawings were objected to for not showing energy director element 22, and for no discussion in the specification of the reference numerals 23 and 30 shown in FIG. 4. Applicants have amended the specification to include reference to numerals 23 and 30.

With regard to energy director 22, Applicants previously submitted a proposed substitute sheet of drawing to show energy director element 22. However, the Examiner disproved the amendment on the basis of new matter. Applicants respectfully request reconsideration.

The specification and figures clearly show a lower energy director 20 that extends

upwardly in a v-shaped fashion along the upper surface of the lower frame element 18. The specification further describes a "corresponding energy director element 22 [that] extends along one-half of the lower perimeter surface of the upper frame element 18. These directors 20 & 22 **mate** with the corresponding frame surface to form the weld during the sonic welding process." (See col. 3, lines 14-19)(Emphasis added). Based on the disclosure of an upwardly shaped energy director 22 that mates with the other energy director 22, those skilled in the art would recognize that energy director 22 must be a groove as shown in the new figure of drawings. Accordingly, the new proposed sheet of drawings does not constitute new matter.

C. The Rejections Based on Lack of Written Description in the Specification

Claims 7-23 were rejected under 35 U.S.C. §112, first paragraph, for alleged lack of adequate written description in the specification. Applicants have amended the claims and respectfully request reconsideration.

1. The Law

The essential inquiry in determining compliance with the "original patent" clause of §251 or the "written description" requirement of §112, paragraph 1, is whether one skilled in the art, reading the specification, would identify the subject matter of the new claims as being invented and disclosed by the patentees. *Hester Industries Inc. v. Stein Inc.*, 46 USPQ2d 1641, 1651 (Fed. Cir. 1998); *In re Amos*, 21 USPQ2d 1271, 1274 - 75 (Fed. Cir. 1991).

The function of the written description requirement is to ensure that the inventor had possession, as of the filing date of the application, of the specific subject matter later claimed by him. *In re Edwards* 196USPQ at 465, 467 (CCPA 1998). To comply with the written description requirement, it is not necessary that the application describe the claimed invention in *ipsis verbis*. *Id.* Indeed, it is immaterial how the application achieves compliance with the written description requirements. *In re Voss* 194 USPQ 267, 271 (CCPA 1977); *In re Smith*

178 USPQ 620 (CCPA 1973). Rather "all that is required is that it [the specification] reasonably convey to persons skilled in the art that, as of the filing date thereof, the inventor had possession of the subject matter later claimed by him." *id.*

The Patent Office has the initial burden of presenting evidence or reasons why those skilled in the art would not recognize in the specification a description of the later claimed invention. *In re Voss*, 194 USPQ at 271.

As pointed out at the interview, the above-identified standards permit an applicant to submit reissue claims that are broader than a specific embodiment shown in the specification. In fact, in two cases remarkably similar to the facts involved in this case, the Federal Circuit and the CCPA specifically approved such claims, applicants' representative provide copies of these two main cases to the Examiner at the interview.

In particular, in *In re Rasmussen*, 211 USPQ 323, 326 (CCPA 1981), the CCPA reaffirmed that reissue claims may be broader than specific embodiments disclosed in the specification without adding new matter as follows:

"Broadening a claim does not add new matter to the disclosure. Disclosure is that which is taught, not that which is claimed. An applicant is entitled to claims as broad as the prior art and his disclosure will allow. . .

As above indicated, that a claim may be broader than the specific embodiment disclosed in a specification in itself is of no moment. Indeed, the statutory provision for broadened claims in reissue applications is intended to meet precisely the situation in which a patentee has claimed 'less' than he had a right to claim. 35 USC 251." (footnote omitted).

The facts in *In re Rasmussen* are instructive. The applicant's specification only described one specific method of using adhesive to stick two layers together. The applicant submitted broadened reissue claims which only described "adherently applying" one layer to an adjacent layer and omitted certain steps. The CCPA reversed the rejection and held that

the applicant was entitled to the broadened reissue claims.

In *In re Peters*, 221 USPQ 952 (Fed. Cir. 1983), the Federal Circuit specifically followed the above statement and ruling from *In re Rasmussen*, 211 USPQ 323. In that case, the patent disclosed a device including tapered tips, and the applicants sought broadened reissue claims that read on both tapered and non-tapered tips. The Board affirmed the rejection based on 35 U.S.C. §251 and §112, first paragraph. However, the Federal Circuit reversed and, in accordance with *In re Rasmussen*, held that applicants were entitled to submit reissue claims broader than the specific embodiment shown in the specification

Likewise, the law here permits Applicants to submit reissue claims that are broader than the specific embodiment disclosed in the specification. *In re Rasmussen*, 211 USPQ at 326; *In re Peters*, 221 USPQ 952.

2. Amended Claims 7-23

Amended claim 7 describes "each cover having a first side and a second side with at least one finger extending from each of said sides." In the Action, the Examiner referred to inadequate disclosure for a single finger on the cover and for the fingers extending from one of the sides instead of both sides. (Office Action ¶¶5). However, applicants' amendment obviates those rejections because it describes at least one finger on each side (fingers) and describes a finger extending from each side rather than just one of the sides. Accordingly, amended claim 7 overcomes the rejections stated in the Office Action.

At the interview, the Examiner indicated that amended claim 7 still might be rejectable because it does not describe a plurality of fingers on each side. However, the specification admittedly provides support for claim 7 as now written because the specification shows an embodiment with at least one finger on each of the sides. Thus, the specification provides adequate support because the claim reads directly on the disclosed embodiment.

Regarding the Examiner's concern that the claim is broader than the specific embodiment shown in the specification, both the CCPA and the Federal Circuit has expressly approved such claims as set forth above and described in detail in *In re Rasmussen*, 211 USPQ at 326; *In re Peters*, 221 USPQ 952.

In a sense, the Examiner appears to be requiring that the disclosure show an objective intent to claim the invention as now claimed. However, the Federal Circuit has expressly rejected "an intent to claim" standard. See *Hester Industries Inc. v. Stein Inc.* 46 USPQ2d 1641, 1651 (Fed. Cir. 1998). Rather, the issue is whether the claims read on the disclosure, and the present claims clearly read on the disclosure. Thus, the claims are adequately supported by the specification. The fact that the claims are broader than the particular embodiment shown in the specification is irrelevant. See *In re Rasmussen, supra*, *In re Peters, supra*.

Amended claims 8 and 11 are allowable for the same reasons as claim 7.

Claims 9 and 16 describe "a plurality of fingers [that] extend from at least two sides." In the Office Action, the Examiner has contended that these claims raise issues of new matter because they read on a device with fingers "on four sides of the metallic cover." Applicants note that all of the claims of this application, including originally allowed claim 1, would read on a cover using fingers on all four sides. That is because all the claims of this application use the transitional term "comprising", and such claims can read on devices including additional elements. The use of "comprising" as a transition phrase in such open ended claims is a well accepted practice, and it is perfectly appropriate for the claims to read on devices that include additional elements. Similarly, claims 9 and 16, which read directly on the disclosed embodiment, can also read on devices that include additional elements without violating §112.

Turning to claim 18, claim 18 describes "a first package half including a stamped metal

cover and a frame element, said cover having an edge bent to conform to a shape of said frame in a generally U-shaped configuration with said frame element being injection molded within the U-shaped edge of the metal cover." The Examiner has rejected the claim as not being supported by the disclosure on two grounds: (1) no disclosure for an U-shaped edge; and (2) new matter issues due to no references to fingers in the claim. Applicants respectfully request reconsideration of both rejections.

Regarding the U-shaped edge, applicants direct the Examiner's attention to FIG. 4. FIG. 4 clearly shows that the edge of the metal cover is bent into a generally U-shaped configuration. Those skilled in the art would clearly recognize the U-shaped edge of the metal cover, and applicants have amended the specification to specifically refer to the U-shaped edge to make this clear. Even though the terminal point of the edge of the cover is slightly bent, this does not alter the two previous bends in the edge that form the generally U-shaped configuration. As long as those skilled in the art understand that the U-shaped edge is shown in FIG. 4, the claim is supported by the specification and adequately defined within the requirements of §112. Applicants note that a drawing, with no written description in the specification, is sufficient support to present new claims supported by only the drawings. *Vas-Cath Inc., v. Mahurkar*, 19 USPQ2d 1111 (Fed. Cir. 1991).

With regard to the omission of a reference to fingers, Applicants respectfully submit that a new matter rejection is inappropriate. An applicant is entitled to claims as broad as the prior art and his disclosure will allow, and the reissue statute expressly permits reissue claims that are broader than specific embodiments shown in the specification. *In re Rasmussen, supra*, *In re Peters, supra*. Accordingly, the new matter rejection should be withdrawn.

Applicants have amended claims 19 and 21 to overcome the new matter rejection raised by the Patent Office.

With regard to claims 22-23, the Examiner has objected to the description of the frame element being "injection molded partially around the edge". However, the specification of the '857 patent teaches that the fingers are embedded into the frame element to prevent separation of the covers from the frame elements (see, for example, column 3, lines 52-56), and the degree in which they are embedded (either partially or fully) does not matter as long as they are embedded in order to prevent separation of the covers and frame elements. One skilled in the art would understand this from the disclosure. See Wingfield Declaration. ¶¶9. Accordingly, claims 22-23 do not describe new matter, and the rejection should be withdrawn.

In support of applicants' position that the specification establishes that the inventors have possession of the features described by the new claims, applicants have submitted herewith the Declaration of James R. Wingfield, an adjunct professor at the Illinois Institute of Technology in the Department of Mechanical and Aerospace Engineering. As described in paragraphs 5, 7 and 9 of that Declaration, Mr. Wingfield has concluded that, based on his review of the 857 patent, the inventors had possession of the features described by the claims of this reissue application. In particular, as described by Mr. Wingfield, the specification on the patent shows that the inventors have possession of a package having one or more fingers extending from the sides of the cover. Wingfield Declaration ¶¶ 5. Further, as described by Mr. Wingfield, the inventors had possession of a package in which the edges of the covers are formed into a U-shaped edge (as shown in Fig. 4), and then a frame element is injection molded within the U-shaped edge of the metal cover. Wingfield Declaration ¶¶ 7. Further, the specification establishes that the inventors had possession of a package in which the fingers are partially or fully injection molded into the plastic frame elements. Wingfield Declaration ¶¶ 9.

As stated above, the essential inquiry is whether one skilled in the art, reading the specification, would identify the subject matter of the new claims as being invented and disclosed by the patentees. *Hester*, 46 USPQ2d 1641; *In re Amos* 21 USPQ 2d at 1274-75. As Mr. Wingfield, one skilled in the art, would identify the subject matter of the new claims as being invented and disclosed by applicants from reading the specification, the claims fully comply with the written description requirement and the rejection should be withdrawn.

3. New Claims 24-28

New claim 24 describes edges including fingers and describes the metal covers having edges bent to conform to the shape of the frames. There is no requirement in the law that the claims specify that there are multiple fingers or a plurality of fingers on each of the sides of the cover. As set forth above, applicants are entitled to submit reissue claims that are broader than the specific embodiment shown in the specification. *In re Rasmussen, supra*; *In re Peters, supra*. Accordingly, new claim 24 is allowable.

New claim 25 describes "means for securing said first and second metal covers to said first and second plastic frame elements." In accordance with 35 U.S.C. §112, paragraph 6, this use of means plus function language refers to the structure shown in the specification. Accordingly, the claim is adequately supported by the specification because it incorporates the specification with regard to this element by reference pursuant to the statutory language. New claims 25-27 are thus allowable as well.

New claim 28 was generally discussed at the interview. The claim describes a cover having two edges bent generally in a U-shape with each of the edges including protruding portions adjacent open portions providing voids. The frame elements have injection molded portions within the U-shaped edges of the covers and the injection molded portions are contained within at least one of the voids on the edges of the covers in order to provide an

integral unit. These protruding portions and voids are clearly shown on the drawings by fingers having spaces therebetween. Accordingly, these claims are supported by the specification, and should be allowed.

D. The Enablement Rejection

The new claims (the specific claims are not specifically identified in paragraph 6 of the Office Action) were apparently rejected under 35 U.S.C. §112, first paragraph, as being based on disclosure which is not enabling. Applicants respectfully request reconsideration.

The Patent Office's main objection appears to be that the disclosure is not enabling for using one finger to secure the covers to the frames rather than a plurality of fingers. Applicants note that many of the new claims do describe fingers. (See, for example, new claims 7, 11 and 24). Thus, those claims should be allowed.

In any event, the specification clearly provides enabling disclosure for making and using the invention whether it be with one finger or more. It is believed that the Patent Office cannot contest that, upon the teaching of how to use fingers, those skilled in the art would understand how to make and use either a single finger or a plurality of fingers. The process for stamping a finger or fingers on the covers, and the process for injection molding the frame element about such finger or fingers, is the same whether there is one finger or multiple fingers. This knowledge of those skilled in the art is proven by the Declaration of Mr. Wingfield. See Wingfield Declaration ¶ 6, 8.

The Examiner's reliance on *In re Mayhew*, 188 USPQ 356 (CCPA 1976) is misplaced. In that case, the Court found the missing element was essential for the method to work. The method also described a chemical like process in which omission of the step could render the entire process unworkable.

To the contrary, Applicant's invention employs bent edges of the cover to secure the

cover to the frame, as well as one or more fingers. As described in the Declaration of James Wingfield, the finger or fingers help prevent relative sliding between the cover and the frame. This could be accomplished with one finger or more fingers. Wingfield Declaration ¶¶ 5 and 6. Further, the use of a plurality of fingers, as opposed to a single finger on each side, is not critical in any way to practice the invention.

Applicants respectfully submit that the enablement rejection is nothing more than the first rejection based on inadequate disclosure set forth under a different name. If the Examiner believes that the claims are not adequately supported by the specification, the Examiner can maintain the rejection on that basis. However, there is no basis for an additional rejection based on the enablement requirement of §112, and the enablement rejection should be withdrawn.

E. The Indefiniteness Rejections

Claims 18-23 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Reconsideration is respectfully requested.

As pointed out above, the U-shaped edge of the metal cover is shown in Fig. 4, and applicants have amended the specification to specifically refer to this U-shaped edge. Thus, the specification and claim are sufficiently definite in order for those skilled in the art to understand the scope of the claims.

With regard to claims 19 and 21, Applicants have amended claims 19 and 21 to overcome the rejections.

F. The Offer To Surrender

Upon allowance, Applicants will file the original patent as requested by the Examiner.

G. The Recapture Rule

Claims 7-23 were rejected under 35 U.S.C. §251 as being an improper recapture of

claimed subject matter. Reconsideration is respectfully requested.

In order for the recapture rule to apply, an applicant must have clearly surrendered and canceled certain claim coverage from the claims in order to obtain allowance. *Ball Corp. v. United States*, USPQ 289, 295 (Fed. Cir. 1984). Further, reissue claims avoid the effect of the recapture rule if the reissue claims are narrower than the canceled claims. *Id.*

In Amendment B filed on August 3, 1994, applicants amended the claim to include the phrase "the plastic frame elements being injected molded around a plurality of fingers." However, the Patent Office did not allow the claims in response to this amendment. Thus, the mere recitation of "a plurality of fingers" was not the amendment that resulted in allowance of the case.

In a subsequent interview with the Examiner and an Examiner's Amendment, the Examiner and applicants' representative discussed the prior art and the claims were further amended in order to obtain allowance. This amendment includes the recitation of describing the "edges of the metal covers [being] bent to conform to the shape of the frame." Applicants respectfully submit that the bent edges of the metal covers was a limitation that resulted in allowance of the claims over the prior art.

In that regard, applicants direct the Examiner's attention to Baudouin et al., which is a main reference cited during the original prosecution. Baudouin et al does not disclose metal covers having bent edges, and thus this limitation clearly and definitively defined over the prior art.

Applicants respectfully submit that it is clear from the prosecution history of the original application that it was not critical to allowance whether the claims described one or more fingers. As a recitation of a "plurality of fingers" was not required for allowance, deletion of this limitation from the claims does not violate the recapture rule. *Ball, supra.*

Applicants point out that independent claims 7, 11, 18, 24 and 28 clearly describe the edges of the metal covers being bent to conform to the shape of the frame or having a bent generally U-shaped configuration. As this limitation is contained in those claims, they are sufficiently narrow in accordance with the claims of the original prosecution to overcome any rejection based on the recapture role.

Furthermore, claims 18, 24, and 28 are even more narrow than the original claims by describing the frame elements being "sonically bonded." As these claims are narrower than the original claims, these claims further do not violate the recapture rule. *Ball, supra*.

I. Explanation of the Support and the Disclosure for the Amendments

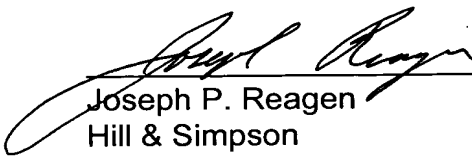
In the Office Action, the Examiner states that a sufficient explanation was not provided for the support and disclosure for each amendment, citing 37 C.F.R. §1.121(b)(2)(iii). Applicants respectfully direct the Examiner's attention to pages 14 and 15 of Amendment A. Those pages set forth such an explanation for claims 7-23.

Further, new claims 24-28 find support in original claims 1-6 and also find support in the specification at column 2, line 57, column 3, line 61, among others. Accordingly, applicants respectfully request withdrawal of this objection.

CONCLUSION

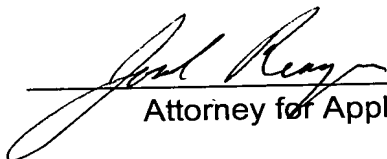
In view of the foregoing, Applicants respectfully submit that this application is now in condition for allowance. Favorable and early action are therefore respectfully solicited. If the Examiner believes that discussing this application further would be helpful, he is invited to telephone the undersigned attorney at the number given below.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Assistant Commissioner of Patents, Washington, D.C. 20231 on March 22, 2000.


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